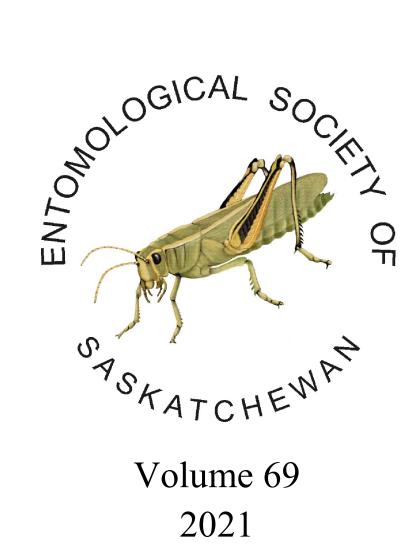
Proceedings of the



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Proceedings of the Entomological Society of Saskatchewan

Volume 69 Editor: Iain Phillips

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Editor's comments

The Society had approximately 92 members (31 full members paid up in 2020-2021 [plus, 24 Life Members] and 39 students). Megan Vankosky became the newest life member from the 2020-2021 fiscal year. A copy of the Proceedings of the Entomological Society of Saskatchewan for 2020 was given to the Saskatchewan Archives. Despite the ongoing COVID-19 pandemic, the ESS was able to successfully deliver the spring meeting and the fall Annual General Meetings by pivoting to an online format. Dave Halstead provided a fantastic talk on methods to adapt the dragonfly diversity of Saskatchewan to biomonitoring tools at the spring meeting, and the student members of the ESS provided five high quality presentations at the fall Annual General Meeting.

It was a busy year, as the Society also began planning for the Entomological Society of Canada and Entomological Society of Saskatchewan Joint Annual Meeting 2023 (ESC-ESS JAM 2023). The Local Organizing Committee (LOC) was struck, and members signed up to fill the positions necessary for building this meeting in a couple years. There were four organizing meetings for the LOC, and the Society resolved to plan to host the meeting in person in Saskatoon through optimism that the pandemic will have abated by then.

Early in 2021 as well, an opportunity arose to obtain an insect rearing facility from the Canadian Food Inspection Agency that generated much excitement. The ESS executive work with the City of Saskatoon through Jeff Boone to find the space to host this facility, but in the end the Canadian Food Inspection Agency sought to establish this facility elsewhere.

Ultimately, I believe there is a climate of enthusiasm and inquiry growing in the Society, as we have a large body of young students participating in our activities and a younger executive taking over roles and responsibilities. A group of ESS students has taken on advancing our communications by integrating the website and newsletter committees into a new Social Media Committee that will encompass all the material we generate as a Society. I look forward to the year ahead, and believe that if the constraints this pandemic has brought upon our Province begin to diminish we will see an outburst of entomological research activity from all our members and increased public inquiry for the great diversity of six-legged life we have here.

Iain

Executive, Officers and Committee Members 2021

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LXC	utive	

President	Stephen Srayko
Vice-President	Stefanie de Heij
Past President	Sean Prager
Secretary	Iain Phillips
Treasurer	Tyler Wist

Committee Chairs:

Youth and Amateur Encouragement	Chrystel Olivier/Tyler Wist
Newsletter Editor	Marianna Horn
Proceedings Editor	Iain Phillips
Honours and Awards	Sean Prager/Tyler Wist
Microscope	Iain Phillips
ESS Website	Jeff Boone/Marianna Horn
Archives and Heritage	Martin Erlandson,
	Cedric Gillott, and
	Meghan Vankosky
Nominations	. Danielle Stephens

Regional Director to the ESCJames Tansey

Auditors: Julie Soroka, and Chrystel Olivier

I. Minutes of the 2021 Spring Meeting



Spring Meeting of the Entomological Society of Saskatchewan April 23^{rd} , 2021, 14:30 pm – Online Virtually

Present: Iain Phillips, Stefanie de Heij, Dave Halstead, Aaron Bell, Dylan Sjolie, Dan Johnson, Daniel Wiens, Danielle Stephens, Graham Parsons, James Tansey, Jeff Boone, Kiara Calladine, Leila Benmerrouche, Meghan Vankosky, Owen Olfert, Sean Prager, Stephen Srayko, Tyler Wist.

SCIENTIFIC AGENDA

14:30 Presentation by Dave Halstead: "Dragonflies and dragonfly assemblages as ecological indicators— an insect discussion with zero agricultural content"

BUSINESS MEETING

15:30 Call to Order – Stephen Srayko

- 1) Introduction of the Members
- 2) Approval of Agenda
 - a. Addition of agenda item: Social media committee to take over newsletter and website new 9c

Motion: Tyler Wist/ Stefanie de Heij. THAT the proposed agenda be adopted.

CARRIED.

3) Minutes of the fall meeting – November 20^{th} , 2020

Motion: James Tansey/Dylan Sjolie. THAT the minutes of the spring meeting November 20th, 2020, be adopted.

CARRIED.

4) Business Arising from the Minutes

- 5) Treasurer's Report Tyler Wist (Appendix A)
 - a. New life member, Meghan Vankosky
 - b. The Entomological Society of Saskatchewan (ESS) has a healthy saving in our term deposits.
 - c. NGO status renewed.
 - d. Total ESS income of \$982.
 - e. Biggest expenses for the ESS in the past year was the Brooks Award and Student Award.

MOTION: Tyler Wist /Jeff Boone. THAT the ESS accept the Treasurer's Report.

CARRIED.

- 6) Secretary's Report and Proceedings Iain Phillips (See Appendix B)
 - a. Prepared minutes of the fall meeting and agenda for current meeting
 - b. Prepared Proceedings for 2019 and 2020.

MOTION: Tyler Wist/Stephen Srayko. THAT the ESS accept the Secretary's Report.

CARRIED.

- 7) Newsletter Marianna Horn Moved to 9c.
- 8) Regional Director's Report James Tansey (See Appendix C)
 - a. Felix Sperling gave a big welcome to the new executive of the Entomological Society of Canada.
 - b. Delusionary parasitosis letter was circulated to the Regional Directors.
 - c. JAM 2021 is planned to go ahead.
 - d. JAM 2022 will be held in Vancouver.
 - e. JAM 2023 will be held in Saskatoon.
 - f. First Nations Outreach May 2021 James Tansey is going to lead an effort to draw First Nations into Entomology.

Motion: Tyler Wist /Daniel Wiens. THAT the Regional Director's Report be adopted.

CARRIED.

- 9) Committee Reports
 - a. Amateur Encouragement Tyler Wist, Chrystel Olivier
 - i. Tyler Wist nothing to report, Gardenscape was cancelled due to COVID-
 - b. Archives/Heritage Martin Erlandson, Cedric Gillott and Meghan Vankosky.
 - i. Nothing to report.
 - c. ESS Social Media Committee -

- i. Stephen Srayko Bernice Romero's idea to create a social media presence, and Marianna Horn proposed that we merge the newsletter, social media and website into one committee.
- ii. Through these social media platforms the Social Media Committee has initiated profiles of Saskatchewan Entomologists.
- iii. The committee currently has a Google Drive document they can work from to organize their activities.
- iv. Marianna Horn the committee has moved on from the newsletter as there have not been any submissions in quite some time.
- v. Stefanie de Heij Where do the notices or invitations for submissions come from?
 - 1. The committee will endeavour to provide more invitations through a variety of platforms and at greater frequency.
- vi. Jeff Boone the ESS has struggled for a long time to get articles for the newsletter, but he believes it will be easier with the social media initiatives we are undertaking.
- vii. Dylan Sjolie When someone is at an outreach event, someone at the event can be in charge of the social media content and post in live action. To show that the ESS is at the events and attract more invitations for the events.
- viii. James Tansey The committee plans to record events.
- ix. Tyler Wist Can the committee prepare a short document on what a takeover would look like for members? With formats and login information?
- d. Microscope Iain Phillips
 - i. Nothing to report, the microscope is still located at the Water Security Agency and available to any members who wish to access it.
- e. Honors & Awards Daniel Wiens
 - i. ESS Entomological Activities Award not awarded in the past few months.
 - ii. Brooks Prize invitations for applications extended for the 2021 year.
- f. Nominations Committee Danielle Stephens
 - i. Nothing to report.
 - ii. Danielle Stephens will solicit nominations for Vice-President through the membership in the coming months.

Motion: Jeff Boone/Dave Halstead. THAT the Committee Reports be adopted.

CARRIED.

10) Other Business

- a. ESS-ESC JAM 2023 discussion and updates
 - i. Creation of committees for the JAM Tyler Wist has been involved in two meetings now, and the most important committee from his perspective is the location committee.
 - ii. Tyler Wist Saskatoon Tourism has been good to work with.
 - iii. The Scientific Chair will be Meghan Vankosky.

- b. Canadian Food Inspection Agency Insect Rearing Facility
 - i. Jeff Boone describes the facility to the membership a sea-can, that contains a wood-boring beetle rearing facility
 - ii. The Canadian Food Inspection Agency has offered this facility to be donated to the ESS and it will be hosted by the City of Saskatoon.

11) Date of the Fall AGM

a. Will tentatively be set for December 3, 2021.

12) Adjournment

Motion: Sean Praeger/Tyler Wist. THAT the spring meeting of the ESS be adjourned.

CARRIED.

Appendix A: Treasurer's Report

ENTOMOLOGICAL SOCIETY OF SASKATCHEWAN MEMBERSHIP AND INTERIM FINANCIAL REPORT

01 September 2020 – 31 March 2021

MEMBERSHIP

- In this fiscal year (2020-2021) so far the ESS has 5 new student members and 3 new Regular members. Welcome to our newest life member Meghan Vankosky!

ESS GENERAL ACTIVITIES

Chequing

- The main sources of income were from membership dues with \$530 collected and interest income of \$452.45.

FINANCE

- The ESS total assets are as follows:

Term Deposits (balance plus accrued interest)

#007 12,000 #009 15,640.09 #011 13,391.19 #012 11,517.61 6,209.74

Outstanding deposits (Paypal)

Outstanding liabilities 0.00

Total 58,758.63 (54,588.41 in 2019)

- Registered Charity and Non-Profit Corporations status were renewed (in Jan 2020).

23.67

- Registered Charity Tax Return was filed in December (2020).

Please refer to the enclosed financial statement for further details.

Financial Statement – Entomological Society of Saskatchewan 01 September 2020 – 31 March 2021

MAXIMIZER ACCOUNT (ESS)

Receipts:

Memberships	\$530.00
Outstanding deposits	
Interest (CU Maximizer and Term Deposit)	\$452.45
TOTAL	\$982.50

Expenditures:

Minister of Finance	\$ 0.00
Brooks Award	\$ 500.00 (B. Romero, 12/2/2020)
Ent. Act. Award	\$ 0.00
Student Presentation Award	\$ 100.00 (A Wade, 12/2/2020)
Meeting Expenses (Fall 2020 was online)	\$ 0.00
Postage	\$ 0.00
Bank Charges (print fees)	\$ 7.00
Website fee	\$ 0.00
Misc. (WRSOS Booth Fee)	\$ 0.00
Misc. (PayPal Fees)	\$ 23.92
Misc. (ISC) fee payback to Tyler (2019)	\$ 30.00
Misc. (ISC) Not-for Profit-renewal fee (Tyler)	\$ 15.00
TOTAL	\$ 675.92

Excess of Receipts over Expenditures \$ 306.53

Appendix B: Secretary's Report



Secretary Report, Entomological Society of Saskatchewan, Spring Meeting April 23, 2021

Activities

I. Position Maintenance

- A) Relayed communications directed at the ESS to the membership
- B) Preparation of Proceedings of the ESS, 2019
- C) Preparation of minutes for ESS fall meeting 2020, Executive Meeting February 8, 2021, and Executive Meeting January 26, 2021.
- D) Preparation of agenda for ESS spring meeting 2021.

II. Insect Inquiries

As the secretary I received and forwarded on numerous insect inquiries to the membership from the public and other professionals interested in Saskatchewan's entomological fauna. Some of the notable inquiries are as follows:

- A) Public inquiries
 - 1) Mystery Insect from Vanessa Young (Fig. 1)
 - 2) Mormon Cricket from Cypress Hills (Fig. 2)
 - 3) Picture-winged fly
 - 4) Weevil found in North Battleford home basement (Fig. 3).
- B) Media inquiries directed to the ESS
 - 1) None to report



Fig. 1 – Mystery insect



Fig. 2 – Mormon Cricket – *Anabrus simplex* Haldeman, 1852, (Orthoptera: Tettigoniidae).



Fig. 3. Weevil found in North Battleford home basement - *Otiorhynchus raucus* (Fabricius, 1776), (Coleoptera: Curculionidae).

Appendix C: Regional Director's Report

Entomological Society of Saskatchewan

ENTOMOLOGICAL SOCIETY OF CANADA REGIONAL DIRECTOR'S REPORT

R	EGIONAL DIRECTOR'S REPORT
Name of affiliated Society:	

Date:

21-04-2021

Summary of activities during report period:

MESC meeting 5 March (minutes attached)

Highlights

- Attendees: Catherine Scott, AES Regional Director (dialed in but lost connection); Dan Johnson, ESAb Vice-President; Terry Eberhardt, ESAb President; Boyd Mori, ESAb Regional Director; Chandra Moffat, ESBC 1st Vice-President; Wim Van Herk, ESBC President; Brian van Hezewijk, ESBC Regional Director; Felix Sperling, ESC 1st Vice-President; Chris MacQuarrie, ESC 2nd Vice-President; Geoff Powell, ESC Executive Director; Gail Anderson, ESC Past President; Bill Riel, ESC President; Neil Holliday, ESC Secretary; Ward Strong, ESC Treasurer; Kateryn Rochon, ESM 1st President-Elect; Jeff Marcus, ESM President; Jason Gibbs, ESM Regional Director; Amanda Roe, ESO President; Rose Labbé, ESO Regional Director; Stefanie De Heij ESS Vice-President; Stephen Srayko, ESS President; James Tansey, ESS Regional Director; Julie-Éléonore Maisonhaute SEQ Vice-Président; Jean-Philippe Parent, SEQ President; Étienne Normandin, SEQ Regional Director.
- Felix Sperling bid welcome to the new presidents and vice-presidents
- Delusory prasitosis letter (attached)
- Several people had undertaken to take action to provide an item in the series Canada's Coolest/Cruelest Insects on the insect featured in their regional society's logo.
- Neil Holliday reported that ESC started the Entomology Enthusiast category in 2020, and as of 31 January 2021 had 37 members in this category. A decision was made yesterday that, at the 2022 Joint Meeting with the Entomological Societies of America and British Columbia that the registration rate for Entomology Enthusiasts would be the same as that for students.
- Regional representation:

Region	Count
AES	1
ESAb	6
ESBC	7
ESM	2

ESO	9
ESS	1
SEQ	10
USA	5
Total	41

- Bill Riel reported that we are planning to go ahead with an in-person meeting at Niagara Falls, Ontario on 14–17 November 2021.
- Felix Sperling and Bill Riel explained that there had recently been a meeting with Rosina Romano, ESA's Director of Meetings, to discuss the Memorandum of Understanding (MOU) among ESC, ESA and ESBC. The MOU deals with the division of surpluses, if any, among the societies. If there is a loss, ESA will cover it. If the surplus is substantial, it will be shared among the eight affiliated Canadian societies according to an already agreed-upon formula. ESBC 1st Vice-President, Chandra Moffatt, will be ESBC President at the time of JAM 2022. She reported that there will soon be a three-society meeting to discuss logo design and a theme for the meeting. That meeting will involve the Presidents of the three societies and other invitees.
- The dates of JAM 2022 are 13–16 November 2022.
- **JAM 2023** ESS President, Stephen Srayko, reported that ESS has a established a planning committee for the meeting, which may occur on 1–4 or 15–18 October. Bids have been received for venues. James Tansey noted that it appears Regina may not be a suitable venue because of a lack of bids from hotels, and reductions in service at the airport. These events favour Saskatoon as a location.
- JAM 2024 SEQ is in the process of identifying a group of people to host the meeting.
- ESM: ESM President, Jeff Marcus, stated that ESM has been discussing Equity, Diversity, and Inclusion partly in response to ESC's discussions of this. City of Saskatoon Entomologist posting forwarded to ESC
- ESS: Stephen Srayko reported that ESS had its first virtual meeting in November 2020, and it went very well.
- **ESAb:** Terry Eberhardt, ESAb President, reported that the ESAb held a virtual AGM and conference in October 2020.
- ESBC: Wim Van Herk, ESBC President, reported that ESBC had donated \$8000, working together with BC Agriculture in the Classroom and Munroe's Books from Victoria, to provide 500 copies of *The Bug Girl* to elementary schools. Wim Van Herk reported that Jessica Ware was the keynote speaker at the ESBC's on-line annual conference in fall 2020. ESBC donated \$1000 to EntoPOC rather than give an honorarium to Jessica.
- Étienne Normandin reminded regional societies of the ESC's Public Encouragement Grants, which is valued at \$500. Because of the pandemic, the rules of the grants have been relaxed to allow for them to be used for student awards as well as in-person or online outreach events. Forms can be obtained from Étienne etienne.normandin@gmail.com and completed forms should be sent to him.
- Neil: "Since distributing the agenda materials, I have learned of an additional item for Board consideration from the Publications Committee. On 16 April, that Committee

received a request from Cambridge University Press (CUP) to consider transitioning *The Canadian Entomologist* to an online-only publication. If this is to be effective for the journal's 2022 volume, the Board will have to agree to the CUP request by 7 May 2021. Hence this must be considered at next week's Board meeting."

Compilation of experiences with online meetings (see attached)

• A webinar on online meeting guidance has been developed by RSB (Ministry of Agriculture). This will be forwarded.

Upcoming

ESC BOD Meeting April 27, 2021 (agenda attached)

FNU Entomology outreach May 6, 2021

• Speakers: Sean Prager (U of A), Tyler Wist(AAFC), Meghan Vankosky (AAFC), Jeff Boone (City of Saskatoon), Mel Hart (U of R), and Kyle Bobiwash (U of M)

Recommendations or action items for the attention of the ESC Board of Directors:

- Forward FNU outreach meeting invitation
- Forward Ent enthusiast information

Respectfully submitted

Jim Tansey

Regional Director, ESC

23-04-2021

Delusory parasitosis letter

Dear xxxx,

Thank you for sending your inquiry to us. We have a very set procedure for these types of medically associated submissions if you wish to continue.

You MUST first see a doctor, dermatologist or other medical professional who is trained to identify problems and isolate specimens directly associated with your symptoms. We do not do examinations and we do not accept any material submitted directly by patients. This is because neither we nor the patient have the appropriate medical background to isolate and remove specimens directly associated with the symptoms. We are at risk of worsening the situation by isolating incidental or non-associated species, and may overlook other causative agents such as embedded plant tissue, inorganic materials, regionalized tissue irritations or growths, etc.

Your doctor must isolate the specimen(s) associated with the symptoms, separate them from any associated tissue, and preserve them in a small vial with 70-95% ethanol or a similar preservative. The doctor can then contact the Manager of the National Identification Service (NIS), and ship the specimens to the following address:

Owen Lonsdale, PhD

Manager, National Identification Service (Entomology)

Agriculture and Agri-Food Canada

K.W. Neatby Building, Central Experimental Farm

960 Carling Ave.

Ottawa, Ontario, K1A 0C6

E-mail: Owen.Lonsdale@agr.gc.ca

Tel.: 613-759-1992

Following analysis, the NIS Manager will communicate the identification(s) with the doctor who will in turn contact you and work to develop a solution. Again, please do not attempt to remove any material yourself or have anyone without a medical background do this on your behalf. I hope I have provided some clarification.

INFORMATION SHARING ABOUT ON-LINE CONFERENCES

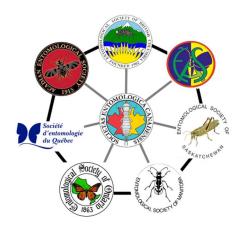
Meeting organization and co	ontact					
SBC Oan Peach each@zoology.ubc.ca	ESAb Boyd Mori, bmori@ualberta.ca	ESS Stephen Srayko, stephen srayko@usask.ca	ESM Jeffrey Marcus, Jeffrey marcus@umanitoba.c a	philippe.parent2@canada.ca & Julie-	AES Paul Manning, paul manning@dal.ca; Sebastian Ibarra Jimenez, sibarra@gov.pe.ca	Western Forum on Pest Management (WFPM) James Tansey: james.tansey@gov.sk.ca
Was the meeting completely	on-line, or a hybrid meeting w	ith on-line and in-person option	ns?		V8	
On-line only	On-line only	On-line only	On-line only	On-line only	On-line only	On-line only
What software was used to o	deliver the on-line component?	1	1	1	1	1
Zoom	Zoom	Webex	Zoom	Zoom (and ensemble.ubishops.ca for posters)	Zoom	Go to webinar
Did the society have to obtain	in a licence for the software or	was it "borrowed"?				
Borrowed university licence	Borrowed	No sure	"Borrowed"	A licence was obtained for Zoom, access to Ensemble was provided free of charge by Bishop's University	Purchased licence for up to 100 participants	Saskatchewan Ministry of Agriculture licence
What was the total on-line a	ttendance at the meeting?		•			
~100 (in-person meetings average 50–60)	54	28	42	207	34	About 800
If different, what was the ma	aximum number on-line at any	one time?	•			•
~60–70		Not sure		119		

ESBC	ESAb	ESS	ESM	SEQ	AES	WFPM
Please describe the structure completed response form).	of the meeting. How long were	the sessions? Were there conc	urrent sessions? How many ses	sions in total? (If it is simpler t	for you, please answer by sendi	ng a program with your
Meeting ran 2½ days. Blocks of presentations were approximately an hour to an hour and a half and each presentation was approximately 15 minutes long. There were no concurrent sessions. Please see the attached program	The meeting ran for two days from 1-4:30 pm (officially, a little longer for the social). There were 20 oral presentations and 4 posters. We had 10 oral presentations each afternoon. The poster session followed the first day and was followed by a short social. The annual general meeting followed the second day. There were no concurrent sessions.	See attached program/minutes- four 15 min presentations, followed by business items	Three morning scientific sessions of 3–4 12 minute presented papers with 3 minutes for questions. Sessions separated by 15 minute breaks. Lunch break followed by AGM. For details see	Two concurrent sessions for the first day, the second half day event was only one session. Each session was 1h long, separated by either a 30 min pause or 1h30 lunch break. Find attached the pdf for the program. Presentations were recorded, with a maximum duration of 12 minutes, followed by a 3 minutes to answer questions live.	There were 4 sessions, each about 75 minutes. Morning session, 15 minute break, late morning session, lnuch (with breakout rooms), early afternoon session, 15 minute break, late afternoon AGM	We conducted four sequential sessions over two days. Presentation and business sessions for entomology and plant pathology. We opted for sequential rather than concurrent sessions so as to reduce personnel/tech/ individual meeting invitations required to manage the sessions and allow individuals with interest in both disciplines to participate.
Was there a poster session; if	so, how was it run?					
No.	Was there a poster session; if so, how was it run? We had a poster session with individual presenters given 5 minutes to present the overall findings of their work via Zoom. We also had a shared Google Drive folder where posters were uploaded. This did not work well, I would not recommend it (personally, I did not want to have a poster session for the size of our meeting, but I was convinced by others).	No	No	Yes, it was held online, on the "ensemble ubishops.ca" website. Posters were available from November 26th to December 4th. 16 posters were available.	No.	No.

ESBC	ESAb	ESS	ESM	SEQ	AES	WFPM
Was there an opportunity for free-form social interaction? If so, please describe.						
There was a zoom hangout and breakout rooms. (See program)	Yes, after the first day we had a social session for those who wanted to stick around. It was via Zoom and informal. We did not have many attendees (~10), so everyone stayed in the main room. We also had a short 15-minute break each afternoon, for those attendees that didn't leave their computer we randomly assigned them to a Zoom breakout room where they could chat with others.	There was open discussion throughout the meeting-I personally found the chat box to be useful in allowing more people to voice their opinions, whereas a typical discussion would be limited to the people speaking.	Before and after each session of talks.	Yes, between 5 and 6 PM, a virtual cocktail took place. Small groups were semi-randomly generated in order to provide discussion between students and scientists for a period of 10-15 minutes. Later on, a quiz was conducted.	Break-out sessions at lunch time offered a chance for people to interact with others around a specific topic of interest. Topics suggested by participants as part of their registration form.	Interaction was limited to chats with occasional verbal input as part of q + a sessions
Was there a charge for partici	pating in the on-line meeting.	f so, what were the meeting re	gistration rates?			
Regular: \$30 Student: \$10	Regular: \$25 Student: \$25	Regular: \$0 Student: \$0	Regular: \$ 0 (Non-members \$45) Student: \$ 0 (Out of province students \$5)	Only the presenters had to pay the fee. Everybody else who registered could attend for free. Regular: \$50 Student: \$25	Regular: \$10 (non- members) Student: \$ 5 (members)	Regular: \$0 Student: \$0
What steps were taken to pre-	vent unauthorized participation	?				
The meeting was password protected and the password was not circulated until the day before the meeting began.	We sent out the Zoom link to only registered participants each day. No unauthorized participants showed, but if they did the host has the ability to remove them from the meeting.	No steps taken, not a concern (that I am aware of)	Zoom link only sent to pre- registered attendees with up-to-date ESM membership and paid registration (if applicable).	The meeting was opened to both members and non-members and registration was free, but they had to register before October 16th (more than a month in advance). Links were only provided to these people registered.	None specifically. Link sent directly to registered e- mail address.	Prior registration was required
ESBC	ESAb	ESS	ESM	SEQ	AES	WFPM
What costs were associated v	with mounting the meeting?					
None.	None.	None	None.	Two Zoom pro licenses (for 2 months to ensure we could plan and practice). We had also originally taken a Zoom webinar licence and found that it was not meeting our needs.	None, in-kind contributions. The AES applied and obtained an ESC public engagement grant to cover costs of student prizes (\$400)	Only the time of the organizers (priceless) It could be argued that there were emotional costs.
Was it intended that the mee	ting generate a surplus, and if s	o, was a surplus generated?		The not meeting our necess.		
Yes, although registration fees were reduced.	Yes, but all surplus was given away as student awards.	No.	No surplus intended. None generated.	The meeting was not planned to generate a surplus, but if did (about \$400 in expenses vs 3K in sponsors and 1.7K in registrations). The actual amount of surplus was of: approximately 4400\$	Not intended. Minimal surplus; however, most recent treasurer report to be discussed at next AGM. Would be minimal surplus, if any.	n.a.
Was the meeting less ambitious than the in-person meeting that it replaced? If so, given your experience, would you contemplate running an on-line or hybrid meeting as ambitious as your society's normal meetings?						
In some ways it was less ambitious (working with limited tools), but in others it was more ambitious (recordings, remote plenary speaker, zoom drawings/doodles during breaks).	It was less ambitious, but had similar attendance levels. I would not want to run a meeting as ambitious as our normal meeting either online or as a hybrid	It accomplished most of the same goals as our usual fall meeting, minus the enjoyment that comes with socializing in-person.	Yes, less ambitious than a typical in-person meeting (one day instead of two, no invited speakers, no social events etc.) Yes, an online or hybrid meeting as ambitious as a normal ESM meeting may be what we do in the future, depending on public health conditions and the desires of the membership.	I would say that the meeting was as ambitious as the in-person meeting it replaced. Meetings in the future, as much as possible, will offer an hybrid formula, increasing participation and accessibility of the shared knowledge to members across the province.	Less ambitious than the in- person meeting due to no need to book venue and arrange food/entertainment.	The meeting was similar to previous in content to in- person but the post-meeting socialization and exchange associate with that was lacking. I would repeat this format if needed. Attendance was much greater than typical in-person versions allowing for much broader dissemination of information.

ESBC	ESAb	ESS	ESM	SEQ	AES	WFPM
If there were to be another or	n-line meeting, what things wou	ald the organizers do differently	y?	1		
Ensure that multiple people or accounts are linked to the zoom license so that moderators can switch off. Perhaps upgrade to a premium account so that features like having panelists are enabled.	No poster session.	Will be running the next meeting (April 23, 2021) in a similar fashion.	The virtual ESM annual meeting went very well. The organization might do something very similar going forward.	We would provide more space for social interaction. Most specifically, we would make sure that the (generally) younger members had the opportunity to keep discussions going in the evening. We assumed all members would be fed-up after a day of online presentations but there was really good energy after the virtual cocktail and many students would have liked to keep the informal discussions going.	Not sure anything. Our meetings tend to be fairly low-key endeavours ©	Ensure that all presenters submit material well beforehand and strictly enforce this: late submission caused some anxiety. Ensure that all presenters submit all presentations to organizers. The fewer people/machines involved in these meetings, the better. In cases of transmission failure (it happens), organizers have a backup to display.
What feedback (positive and	or negative) was received from	n meeting participants?				
Feedback was rather positive, but there was also the unanimous desire to return to in-person meetings.	Everyone enjoyed it. The length of time was appreciated.	No feedback as of yet.	On the whole, it was received very positively. I have heard few complaints, other than people wishing that they could see each other again in person.	We didn't receive any official feedback via surveys etc. but received a few emails from people saying things were very well run and they really enjoyed being able to connect with their colleagues again. Everything was positive, no complaints on our end	People liked the online format, length of sessions were not too long, breaks were adequate and the breakout sessions were well attended.	Generally, very positive re content, delivery, and format The only negative was the lack of social interaction post-meeting and, as we're all too familiar with, cues from the audience.

ESBC	ESAb	ESS	ESM	SEQ	AES	WFPM
Please provide any additional comments you think would be helpful to others contemplating running an on-line meeting.						
Two meeting coordinators participated in a workshop run by ESA on preventing harassment at meetings, and also for virtual meetings. It's easy for folks to abuse question and chaf functions, and one bad actor can cause a lot of grief. Fortunately we had no such issues at our meeting.	The ESA normally has a 1.5-2 day meeting. It begins with a social on Thursday evening, and then an all-day meeting on Friday, and either an all day or half day meeting on Saturday. We conducted a poll of our members prior to the online meeting, and almost all said they would not attend a full day meeting. We decided that it would be best to break up the meeting over two short afternoon sessions, and it worked well.		Our virtual meeting featured a symposium focused on student and postdoc presentations. Limit of 100 set by the Zoom licence	Video recording of the presentation in advance allows to ensure the quality of the presentation, respect time constraints and sharing the content over a longer period than the actual meeting (i.e. for a week).	If running concurrent sessions, just ensure they run on time so people can flip between the sessions with ease.	Enlist a moderator that is fluent in the technology and someone else to vet/forward/read questions. The chair will have chaotic behind-the scenes issues to address in addition to keeping the meeting moving. I really wish that wasn't the case, but it felt very much like a duck much of the time (calm above — mad paddling below). A govt/uni/industry host keeps costs down that can be reflected in reduced attendance fees. Organizing committee should meet early and often. Our moderators prepared a 'online tips for organizers' document. I've requested and will forward.
Double click on link to see program (if provided)						
0	n.a.	9	9	9	n.a.	n.a.



Meeting of the Entomological Societies of Canada (MESC)

Zoom Meeting: Friday 5 March 2021

Action items

Action Neil: to distribute the delusory parasitosis letter to all on the attendance list for the meeting. 21

Action Regional Societies: to consider making applications for ESC's Public Encouragement Grants 25

Present

Catherine Scott, AES Regional Director (dialed in but lost connection); Dan Johnson, ESAb Vice-President; Terry Eberhardt, ESAb President; Boyd Mori, ESAb Regional Director; Chandra Moffat, ESBC 1st Vice-President; Wim Van Herk, ESBC President; Brian van Hezewijk, ESBC Regional Director; Felix Sperling, ESC 1st Vice-President; Chris MacQuarrie, ESC 2nd Vice-President; Geoff Powell, ESC Executive Director; Gail Anderson, ESC Past President; Bill Riel, ESC President; Neil Holliday, ESC Secretary; Ward Strong, ESC Treasurer; Kateryn Rochon, ESM 1st President-Elect; Jeff Marcus, ESM President; Jason Gibbs, ESM Regional Director; Amanda Roe, ESO President; Rose Labbé, ESO Regional Director; Stefanie De Heij ESS Vice-President; Stephen Srayko, ESS President; James Tansey, ESS Regional Director; Julie-Éléonore Maisonhaute SEQ Vice-Président; Jean-Philippe Parent, SEQ President; Étienne Normandin, SEQ Regional Director.

Regrets

Chris Cutler, AES Vice-President; Alex Smith, ESO President-Elect

Absent

Gaétan Moreau, AES President

Minutes

1. Call to order

ESC 1st vice-president, Felix Sperling, called the meeting to order at 10:32 AM CST.

2. Background

Felix Sperling explained that these regular meetings of the Canadian entomological societies are a relatively new innovation, and called upon ESC President Bill Riel to provide further information.

Bill indicated that these meetings were an outcome of a 2017 ESC strategic planning activity, which identified the need for more connections with and among regional societies. Initially these twice-annual meetings involved regional directors and regional society presidents. We realized that this arrangement provided little continuity, and so this is the first meeting to which vice-presidents of regional societies have been invited. It is hoped that this new arrangement will allow more continuity of activity when regional societies work with ESC or with each other on issues of mutual interest. The meetings are informal and provide opportunities to raise issues or make comments or complaints.

3. Welcome to new Presidents and Vice-Presidents

Felix Sperling bid welcome to the new presidents and vice-presidents, and to all other participants. He drew attention to the round table near the end of the meeting, which would provide an opportunity for each regional society to raise issues of concern or mutual interest.

4. Additions to and approval of the agenda

ESC Secretary Neil Holliday reported that the agenda had been distributed on 26 February 2021. There were no additions to the agenda.

5. Minutes of the MESC meeting of 26 October 2020

Neil Holliday reported that the minutes of the last meeting had been distributed in January 2021 to those who attended it. They had also been distributed with the agenda package for the current meeting on 26 February 2021. No corrections were identified.

6. Follow-ups from previous minutes

6.1. Canada's Coolest/Cruelest Insects

Several people had undertaken to take action to provide an item in the series Canada's Coolest/Cruelest Insects on the insect featured in their regional society's logo.

It was noted that Catherine Scott, AES Regional Director, was to work to get an item from AES. ESBC Regional Director, Brian van Hezewijk, pointed out that she had been successful, because an item on apple maggot, AES' logo insect, had appeared in the March Bulletin.

Boyd Mori, ESAb Regional Director, reported that ESAb thought that their logo represents a cutworm, but it is not known what species. Once the species identity issue is settled, Kevin Floate has agreed to write the item for Canada's Coolest/Cruelest Insects.

Rose Labbé, ESO Regional Director, indicated that ESO has not yet identified a person to do the write-up, but will do that.

6.2.Entomology Enthusiast Notice

Neil Holliday reported that ESC started the Entomology Enthusiast category in 2020, and as of 31 January 2021 had 37 members in this category. A decision was made yesterday that, at the 2022 Joint Meeting with the Entomological Societies of America and British Columbia that the registration rate for Entomology Enthusiasts would be the same as that for students.

A bilingual notice about the Entomology Enthusiast category was sent out on 30 October 2020 to regional directors and then society presidents. Neil requested distribution to natural history societies, and similar organizations within each society's region, and asked to be notified of the destinations to which the notice had been sent. Rose Labbé had responded that the notice had been distributed via ESO's social media. James Tansey had previously sent similar notices to organizations in Saskatchewan, and provided a list of those. There was no response from other societies.

Catherine Scott called in from French Guyana to report that AES has distributed the notice; it is on the AES website, was tweeted, and was sent to the Blomidon Naturalists' Society. Catherine had also sent it to Peggy Dixon with a request that it be sent out to organizations in Newfoundland.

Boyd Mori sent out the notice to some organizations, but did not send it out to members of ESAb. He will now do so.

Étienne Normandin, SEQ Regional Director, has sent the notice to the Association des Expositions Agricoles du Québec.

Wim Van Herk, ESBC President, reported that ESBC has yet to distribute the notice but will do so as soon as possible, and report back.

James Tansey, ESS Regional Director, requested information on the regional distribution of the Entomology Enthusiasts members of ESC. Neil Holliday agreed to provide this information which is shown below (as of 28 February 2021):

Region	Count
AES	1
ESAb	6

ESBC	7
ESM	2
ESO	9
ESS	1
SEQ	10
USA	5
Total	41

6.3. Delusory parasitosis letter

Gail Anderson, ESC Past President, explained that, at the last meeting there had been a discussion of how to deal with what appear to be delusory parasitosis enquiries. She explained that Patrice Bouchard had supplied a letter that is a useful response to what can be an awkward situation. It explains that entomologists are not doctors, but provides advice on how to collect insects and submit them. The letter can be modified before transmission to an enquirer.

ESM President-Elect, Kateryn Rochon, indicated that she would be interested in getting the letter. She has dealt with a number of these enquiries, but some of these have turned out to be genuine insect infestations issues rather than mental issues. Bill Riel thinks the letter is quite good, and it does not assume that this is a mental health issue. ESC Treasurer Ward Strong says that ESBC has been using the letter for about a year and found it to be very beneficial.

ESAb Vice-President, Dan Johnson, indicated that physicians are often pleased to get help from entomologists, but are often reluctant to bother "the experts".

Action Neil: to distribute the delusory parasitosis letter to all on the attendance list for the meeting.

7. New Business

7.1. Joint Annual Meetings

7.1.1. Plans for 2021 JAM with ESO

Bill Riel reported that we are planning to go ahead with an in-person meeting at Niagara Falls, Ontario on 14–17 November 2021. There will not be an on-line component because the conference venue cannot offer a simultaneous on-line component.

All ESC business meetings, including the Meeting of the Entomological Societies of Canada will be held virtually before the Niagara Falls meeting, probably in late October. Student and achievement award ceremonies, will take place in Niagara Falls, as will the President's Reception.

7.1.2. JAM 2022 with ESA and ESBC

Felix Sperling and Bill Riel explained that there had recently been a meeting with Rosina Romano, ESA's Director of Meetings, to discuss the Memorandum of Understanding (MOU)

among ESC, ESA and ESBC. The MOU deals with the division of surpluses, if any, among the societies. If there is a loss, ESA will cover it. If the surplus is substantial, it will be shared among the eight affiliated Canadian societies according to an already agreed-upon formula.

ESBC 1st Vice-President, Chandra Moffatt, will be ESBC President at the time of JAM 2022. She reported that there will soon be a three-society meeting to discuss logo design and a theme for the meeting. That meeting will involve the Presidents of the three societies and other invitees.

The dates of JAM 2022 are 13–16 November 2022.

7.1.3. Discussion of the future of Joint Annual Meetings

JAM 2023 ESS President, Stephen Srayko, reported that ESS has a established a planning committee for the meeting, which may occur on 1–4 or 15–18 October. Bids have been received for venues. James Tansey noted that it appears Regina may not be a suitable venue because of a lack of bids from hotels, and reductions in service at the airport. These events favour Saskatoon as a location.

JAM 2024 SEQ is in the process of identifying a group of people to host the meeting.

Neil Holliday reported that the main purpose of the agenda item is to alert regional societies that discussions and representations within ESC that suggest that the future of ESC annual meeting may be different from the current Joint Annual Meeting model. The ESC Board has heard from those who, on environmental grounds, are reluctant to travel to a single distant location for a meeting, and others favour on-line meetings as providing more inclusivity. He expects that as part of the ESC's next strategic planning process (postponed from JAM 2021) there will be consideration of alternatives to the current single annual large in person meeting with members from all parts of Canada travelling to it. Possibilities are that meetings will become hybrid, with in-person and on-line participation, or that there could be a shift to having multiple on-line scientific meetings through the year, with a small annual in-person business and scientific meeting (this is similar to the pattern followed by the Royal Entomological Society of London).

Neil pointed out that there are financial implications for regional societies of moving away from a large in-person JAM. Many of the regional societies depend upon the surplus generated by the JAM that they host approximately every seven years. That surplus allows them to operate and fund student awards etc. through the interval between hosting of JAMs. This is not a threat from ESC, but advance warning of a probable reality that is likely to be thrust upon societies. ESC is open to discussion of what the future should look like.

ESC 2nd Vice-President, Chris MacQuarrie, indicated that there would be a survey of ESC membership emerging within a few weeks, and it contains questions on the topic of future meetings. He encouraged meeting participants to complete the survey and urge other members to do so too.

Étienne Normandin pointed out that participants in future meetings may be required to produce proof of vaccination.

8. Next meeting of the Entomological Societies in Canada (MESC)

Neil Holliday reminded participants that it is proposed that all ESC Board and Members meetings that are normally associated with the JAM will be held by videoconference, probably in late October so that there is no conflict with the JAM, among these is the next MESC. A Doodle poll will be initiated in September to establish a date.

9. Round table

Felix Sperling invited attendees to bring forward any items of interest to the meeting, and suggested that the order of speaking should be from east to west.

AES: Nothing to report.

SEQ: Jean-Philippe Parent, President of SEQ, reported that SEQ's last meeting was completely on-line; SEQ hopes to repeat that type of meeting in the future. Costs were low, and revenue was quite good, and so the meeting was very successful financially

ESO: Amanda Roe, President of ESO reported that ESO did not have a meeting in 2020. Amanda asked whether Jean-Philippe could provide a write-up of how they ran the meeting. Jean-Philippe would be happy to share.

James Tansey noted that he had just been involved in the organization of the on-line Western Forum meetings. He would be happy to provide information on how that was done.

Chandra Moffat reported that the Acadian Entomological Society also ran a virtual meeting and had made money. ESBC did as well and she expected Wim Van Herk would report on that in a few moments.

It was agreed that it would be useful for those societies that had conducted virtual meetings to share their experiences.

Action Neil: to make a request to regional societies to provide information on their virtual meetings, which he will then collate and distribute to all MESC participants.

ESO is trying to define what the secretary should do, as they are looking for a replacement for their long-serving secretary. Many duties have been downloaded to the secretary, and that makes the position somewhat unattractive. ESO is having a problem with contacting its members by email, as there membership exceeds the cap in gmail on the size of distribution lists. Amanda is curious how other societies have handled this problem.

Felix has had a similar problem and had to split email distribution lists into multiple pieces. Amanda indicated that this would be an added stress for the secretary to send out information in multiple batches. Dan Johnson reported that he had a minor experience this month on the subject of caps on meetings. Libraries ask Dan to talk about insects, and they have to cap their distribution lists at 100. However, the local speakers' club made a request for him to speak and show photos, and will use youtube, which allows unlimited attendance.

Rose Labbé clarified that ESO had had a virtual meeting featuring student presentations.

ESM: ESM President, Jeff Marcus, stated that ESM has been discussing Equity, Diversity, and Inclusion partly in response to ESC's discussions of this. The Society has made progress with language and policy related to EDI, and are considering how ESM can be made for accessible to people who may now feel excluded. The annual meeting was a one-day on-line event with a student symposium and the business meeting. Membership was required, but there was no meeting registration fee. The meeting made a slight surplus. Attendance was about the same as for normal in-person meetings.

ESS: Stephen Srayko reported that ESS had its first virtual meeting in November 2020, and it went very well. The next virtual meeting is planned for 23 April 2021. ESS has created a social media committee to increase on-line presence with Twitter and Instagram. James Tansey reported that ESS is reaching out to the First Nations University of Canada for inclusion and to try to get their participation in JAM 2023.

ESAb: Terry Eberhardt, ESAb President, reported that the ESAb held a virtual AGM and conference in October 2020. The meeting was a success; it was run by Boyd Mori; Terry does not recall financial details. ESAb is waiting to see what outreach can be done in the summer. Boyd Mori reported that the virtual conference was run through Zoom. There was a charge of \$25 for regular members; all funds went to student awards. There were a few more attendees than usual.

ESBC: Wim Van Herk, ESBC President, reported that ESBC had donated \$8000, working together with BC Agriculture in the Classroom and Munroe's Books from Victoria, to provide 500 copies of *The Bug Girl* to elementary schools. The book is a true story about a girl who is interested in insects and is bullied at school as a result, but overcomes this. As a result of the collaborative effort, BC Agriculture in the Classroom is highlighting other entomology books on its website.

Jean-Phillipe Parent asked whether there a French version of the book. Chandra Moffat responded that details of the book are at:

https://www.penguinrandomhouse.ca/books/580438/the-bug-girl-by-sophia-spencer-the-bug-girl-herself-with-margaret-mcnamara-illustrated-by-kerascoet/9780735267527. Only an English version is mentioned on the publisher's website, but we could contact the publisher.

Wim Van Herk reported that Jessica Ware was the keynote speaker at the ESBC's on-line annual conference in fall 2020. ESBC donated \$1000 to EntoPOC rather than give an honorarium to Jessica.

Brian van Hezewijk reminded attendees that the *ESC Bulletin* has a section on news from the regional societies and the information that has been presented during the round table should be written up and submitted to Cedric Gillott, Bulletin Editor (cedric.gillott@usask.ca).

Action Regional Societies: to write up their news for publication in the News from the Regions section of the ESC Bulletin.

Étienne Normandin reminded regional societies of the ESC's Public Encouragement Grants, which is valued at \$500. Because of the pandemic, the rules of the grants have been relaxed to allow for them to be used for student awards as well as in-person or on-line outreach events. Forms can be obtained from Étienne etienne.normandin@gmail.com and completed forms should be sent to him.

Action Regional Societies: to consider making applications for ESC's Public Encouragement Grants

It was noted that messages purporting to come from the ESC President were being received by many meeting participants. These should be carefully inspected: the email address is not that of Bill Riel, which is either bill.riel@canada.ca or wgriel@gmail.com.

10. Adjournment

Felix Sperling declared the meeting adjourned at 11:35 AM CST.

II. Minutes of the 2021 Fall Annual General Meeting



Fall Annual General Meeting of the Entomological Society of Saskatchewan
December 3rd, 2021, 13:30 pm
Online virtually.

MEETING CONNECTION INSTRUCTIONS:

Webex:

https://usask.webex.com/usask/j.php?MTID=mc199c0282ec4d948040f52e56a460b53

Meeting number: 2598 424 6126

Password: vbHi7q3vY6V

More ways to join:

Join by phone

+1-306-808-2023 Canada Toll (Saskatoon) or +1-855-966-1197 North America Toll Free

Access Code: 2598 424 6126

SCIENTIFIC PROGRAM

Student presentations presented below, with full abstracts following the agenda (Appendix A).

Student Presentations

1:30-1:45 **Dylan Sjolie**, Christian Willenborg, Meghan Vankosky

Investigation of over-wintering and early season larval *Cephus cinctus* (Hymenoptera: Cephidae) mortality in southern Alberta.

1:45-2:00 **Scout Butler-Siemens**, and Iain D. Phillips

Impacts of cattle grazing on the assemblage of ground beetles (Coleoptera: Carabidae) in riparian areas.

2:00-2:15 Aaron J. Bell, Kiara S. Calladine, David A. Wardle, and Iain D. Phillips

Rapid colonization of the post-burn environment improves egg survival in pyrophilic ground beetles (Coleoptera: Carabidae).

2:15-2:30 Breanne McIvor, Aaron J. Bell, Stephen Paterson, Tim Jardine, Iain D. Phillips

Toward discerning an appropriate trophic fractionation constant for insect predation in stable isotope food-web studies.

2:30-2:45 Berenice Romero, Chrystel Olivier, Tyler Wist, and Sean Prager

What no-choice and two-bioassays can tell us about Aster leafhoppers' host choice selection behavior.

COFFEE BREAK

BUSINESS MEETING

3:00 Call to Order – Stephen Srayko

1) Introduction of the members

James Tansey, Tyler Wist, Stephen Srayko, Jeff Boone, Danielle Stephens, Graham Parsons, Marianna Horn, Daniel Wiens, Aaron Bell, Abigail Cohen, Anna Leighton, Bethany Koch, Dan Johnson, David Halstead, Dough Baldwin, Dylan Sjolie, Farrah Fisher, Georgiana Antochi, Julie Soroka, Leila Benmerrouche, Meghan Vankosky, Owen Olfert, Patricia, Scout Butler-Siemens, Stefanie de Heij, Sydney Worthy, Sean Prager, Berenice Romero

- 2) Approval of Agenda
 - a. Change honours and awards committee chair from Stephen Srayko to Sean Prager

MOTION: Jeff Boone /Dave Halstead. THAT the proposed agenda be adopted as amended. **CARRIED.**

3) Minutes of the Spring Meeting – April 23rd, 2021

MOTION: Tyler Wist/Meghan Vankosky. THAT the minutes of the ESS Spring Meeting April 23rd, 2021, be adopted.

CARRIED

- 4) Business Arising from the Minutes
 - a. None
- 5) Treasurer's Report Tyler Wist (Appendix B)
 - a. 92 members listed in the Entomological Society of Saskatchewan, but Tyler Wist has not removed members who have not paid membership.
 - b. 31 full members who are paid up, and 24 life members, newest life member Meghan Vankosky.
 - c. The Entomological Society of Saskatchewan in good financial standing

- d. Julie Soroka and Chrystel Olivier serving as auditors.
- e. Berenice Romero won the 2021 Brooks Award,
- f. The Treasurer issued a \$100 student presentation award to Andrea Wade for her presentation at the Entomological Society of Saskatchewan Annual General Meeting 2020.

MOTION: Tyler Wist/Jeff Boone. THAT the ESS accept the Treasurer's Report.

CARRIED

- 6) Secretary's Report and Proceedings Iain Phillips (Appendix C)
 - a. The minutes from the spring meeting of the Entomological Society of Saskatchewan were prepared and circulated to the membership.
 - b. The Proceedings of the Entomological Society of Saskatchewan were prepared and published on the society's website.
 - c. The agenda for the fall 2021 Annual General Meeting of the Entomological Society of Saskatchewan were prepared and circulated to the membership.

MOTION: Iain Phillips/Tyler Wist. THAT the ESS accept the Secretary's Report.

CARRIED

- 7) Newsletter- Marianna Horn
 - a. Material have come in for a newsletter, but it is in construction. Marianna asks the members for more material to build the newsletter on.
- 8) Regional Director's Report James Tansey (Appendix D)
 - b. The Canadian Entomologist is moving to an all online format in 2022, and discussions are going on for open source format in the future.
 - c. There was a proposal to increase membership fees in 2022 at the Board of Directors meeting, but not concluded yet.
 - d. At the Board of Directors meeting, they presented a slate of candidates for the Entomological Society of Canada executive.

MOTION: Marianna Horn/Graham Parsons. THAT the ESS accept the Regional Director's Report.

CARRIED.

- 9) Committee Reports
 - a. Amateur Encouragement Chrystel Olivier and Tyler Wist
 - i. Gardenscape is going ahead again this year, but we are unsure if Agriculture and Agri-Food Canada staff are allowed to attend. Tyler Wist has not yet responded to Gardenscape for our participation but is eager to receive feedback from the membership on how much interest there is in setting up a booth again this year.
 - ii. There has been no request for Good-Bugs, Bad-Bugs from the Gardenscape organizing committee yet.

- iii. If we do the Good-Bugs, Bad-Bugs then registration has been waived in the past. Tyler Wist will reach out to see if they are interested in having the booth again this year.
- b. Archives/Heritage Cedric Gillott, Martin Erlandson and Meghan Vankosky
 - i. Little activity has been done on archives and heritage this year. Iain Phillips has suggested that he may have materials he inherited as Secretary that he can hand over.
 - ii. Aaron Bell asks why not all members of the ESS are present on the "Entomologists of Saskatchewan." Meghan replies that the criteria they used in deciding who to add to the list was based on those employed as entomologists, but the document is "evergreen" and members can just ask to be included.
- c. ESS Website Marianna Horn, Jeff Boone,
 - i. Marianna Horn The links for the Twitter feed and the Instagram account have been added to the website. The link requires the proper Java script, and Marianna is working to resolve this, and as it stands web browsers such as Firefox no longer use java script and the link won't work on that browser.
 - ii. Marianna Horn will be updating the ESS Executive members after this meeting.
 - iii. Marianna Horn asks if there should be a central repository on the website for insect inquiries. Jeff Boone volunteers to be the contact on that repository to send the inquiries to the rest of the members.
 - iv. In the future, the ESS Website Committee will be reported as the "Social Media and Website Committee"

Action Item: Creation of Insect ID Repository on Website – Jeff Boone.

Action Item: Creation of the Social Media Committee – Stefanie de Heij. The social media committee is already created and Stefanie de Heij has submitted a short committee update. From now on the social media committee shall be in the meeting agenda under committee reports and the newsletter and website can be integrated within the Social Media Committee, as it now all falls under one committee.

- d. Microscope Iain Phillips
 - i. The microscope is currently in use by Stefanie de Heij.
- e. Honors & Awards Sean Prager and Tyler Wist (Appendix E)
 - i. ESS Entomological Activities Award
 - One awarded to Aaron Bell (\$500), and he presented on those activities at this meeting.

- Abigail Cohen (\$750) to support her attendance at the Entomological Society of America meeting in Denver, Colorado
 - She will provide a report on her experience in the Newsletter.
- ii. No Brooks Prize was awarded in 2021.
- f. Nominations Committee Danielle Stephens

President Stefanie de Heij
Past-President Stephen Srayko
Vice-President Graham Parsons
Regional Director to ESC Danielle Stephens

Treasurer Tyler Wist
Secretary Iain Phillips
Auditors Julie Soroka
Chrystel Olivier

MOTION: Jeff Boone/Dan Wiens. THAT the ESS accept the Committee Reports.

CARRIED

10) Other Business

- g. Spring Meeting Date
 - i. Iain Phillips suggests April 8th, 2022, and there were no objections from the membership. The spring meeting date is set for April 8th, 2022 unless other conflicting events require changing the date (e.g., Biology Department Graduate Seminars).

h. ESS-ESC JAM 2023

- i. Tyler Wist, as General Chair of the ESS-ESC 2023 JAM LOC provides the membership the background and summary of the planning progress that has been made in preparing for the meeting.
- ii. Volunteers should send requests to join the organizing committee to Iain Phillips as Secretary of the Society.
- iii. Iain Phillips shared the ESS-ESC JAM 2023 LOC Executive Minutes, November 29, 2021 with the general Entomological Society of Saskatchewan membership.
- iv. Tyler Wist presents the Notice of Motion from the ESS-ESC JAM 2023 LOC Executive Minutes, November 29, 2021, that the structure of the ESS-ESC JAM 2023 Planning Committee be accepted.

NOTICE OF MOTION: Tyler Wist/Iain Phillips. THAT the structure of the ESS-ESC JAM 2023 Planning Committee above be accepted.

CARRIED

- v. General discussion and call for volunteers.
- c. Gardenscape 2021
 - i. Refer back to the Youth and Amateur Encouragement Report above.
- d. 2022 City Nature Challenge Saskatoon Participation
 - i. Tyler Wist requests that the Secretary of the Entomological Society of Saskatchewan respond saying that we are in support of our members participating in the event.

Action Item – Iain Phillips will contact Julia to provide that we will engage with this initiative and participate.

e. Jeff Boone describes how an Endangered Species Sub-Committee, and/or insects and climate change as a committee would be worth-while and a topic he feels many members would be in support of.

Action Item – Jeff Boone will strike a sub-committee.

- 9) Installation of the new executive
- 10) Adjournment

MOTION: Stefanie de Heij. THAT the ESS adjourn the Fall Meeting 2021.

CARRIED.

Appendix A: List of Abstracts

Investigation of over-wintering and early season larval *Cephus cinctus* (Hymenoptera: Cephidae) mortality in southern Alberta.

Sjolie, Dylan ^{1,2}, Christian Willenborg¹, Meghan Vankosky²

¹Department of Plant Sciences, University of Saskatchewan, 51 Campus Drive, Saskatoon, Saskatchewan, Canada, S7N 5A8.

²Saskatoon Research and Development Centre, Agriculture & Agri-Foods Canada, 107 Science Place, Saskatoon, Saskatchewan, Canada, S7N 0X2.

Email: dms680@usask.ca

Abstract:

The wheat stem sawfly *Cephus cinctus* Norton (Hymenoptera: Cephidae) is a long-standing pest of wheat *Triticum* spp. (Poaceae) in the northwest Great Plains region of North America. Early instar feeding within the stem and late instar stem lodging can cause upwards of \$400M CAD annually during severe infestations. Control measures for *C. cinctus* largely rely on the implementation of resistant solid-stem cultivars and natural enemies including two larval idibiont parasitoids, *Bracon cephi* Gahan and *B. lissogaster* Muesebeck (Hymenoptera: Braconidae), and fungal infection by *Fusarium* spp. To gain a better understanding of larval mortality factors in Canadian agroecosystems, a survey was conducted in southern Alberta wheat fields with high *C. cinctus* populations. Stems collected in Fall 2020 and spring 2021 were dissected to measure changes in larval survivorship at a site level. *C. cinctus* population dyanmic implications and surveying challenges will be discussed.

Impacts of cattle grazing on the assemblage of ground beetles (Coleoptera: Carabidae) in riparian areas.

Scout B. Butler-Siemens^{1,2}, and Iain D. Phillips^{1,2,3,4}

¹Department of Biology, University of Saskatchewan, 112 Science Place, Saskatoon, Saskatchewan, Canada. S7N 5E2.

²Troutreach Saskatchewan Program, Saskatchewan Wildlife Federation, 9 Lancaster Road, Moose Jaw, Saskatchewan, Canada. S6J 1M8

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⁴Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany.

Email: sbb079@usask.ca

Abstract:

Beef cattle grazing patterns are well documented in prairie ecosystems and without intervention of rotational grazing systems, beef cattle spend a higher proportion of time grazing in and around riparian zones than on adjacent plateau grass lands. Riparian areas provide ecological goods and services for aquatic ecosystems and are essential in maintaining the stability and quality of prairie waterbodies. Persistent grazing in riparian areas often results in an increase in bare ground, pugging and hummocking, loss of bank stability, manure build up, and soil erosion, resulting in potential impacts on the insects living in these habitats. Grounds beetles (Coleoptera: Carabidae) in particular are valuable bioindicators to assess the health of the terrestrial environment which makes them a good candidate to be used alongside vegetation analysis to assess riparian zone health. Here we experimentally investigate the relationship between varying levels of cattle altered riparian zones and carabid beetle assemblage along a gradient of cattle riparian activity and through recovery from cattle exclusion. The goal of this study is to better understand how the alteration of soil and vegetation from cattle activity impacts the assemblage of ground beetles in riparian areas.

Rapid colonization of the post-burn environment improves egg survival in pyrophilic ground beetles (Coleoptera: Carabidae).

Aaron J. Bell^{1,2}, Kiara S. Calladine², David A. Wardle³, and Iain D. Phillips^{1,2,4,5}

Contact: <u>aaron.bell@usask.ca</u>

Abstract:

Many insects are drawn to the heat, ash, and smoke produced by forest fires and arrive in large numbers at recent burns, often while the fire is still active. Some of these pyrophilic insects reproduce exclusively in the immediate aftermath of fire and are rarely, if ever, collected from unburnt habitats. Numerous observations made at active fires note an apparent preference among some pyrophilic insects to oviposit exclusively in the burnt portions of trees, raising broader questions about the adaptive benefits of reproduction in the post-burn environment. Here, we tested whether the reproductive output of pyrophilic ground-beetles (i.e., Sericoda spp.) increased in heat-sterilized soils. In the first experiment, eggs of Sericoda quadripunctata were reared in three types of soil: recently burnt soil (collected 1-2 weeks after the fire), 1-year old soil, and soil from an unburnt forest. Daily monitoring through a dissecting microscope documented extensive predation of eggs by soil microarthropods (mites, collembola, and nematodes), especially in 1-year old and unburnt soil treatments. This led to a second experiment that included a fourth soil treatment: recently burnt soil reheated to 100 °C for 2 hours (i.e., reheated soil). In this experiment, male and female pairs (n = 100) of Sericoda obsoletum were reared for 14 days in jars containing 90 g of soil corresponding to one of the four soil treatments. Reproductive output, measured as the number of larvae produced by each breeding pair, was significantly higher in the reheated soil, suggesting that heat-sterilization and removal of soildwelling predators improved egg survival. The adaptive significance of this reproductive strategy and its role in the evolution of pyrophily in insects are discussed.

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⁵Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany.

Toward discerning an appropriate trophic fractionation constant for insect predation in stable isotope food-web studies.

Breanne McIvor¹, Aaron J. Bell^{1,2}, Stephen Paterson^{1,3}, Tim Jardine⁴, Iain D. Phillips^{1,2,5,6}

Email: blm362@usask.ca

Abstract:

Stable isotope analysis is a method used to assess trophic relationships and food web structure within ecological systems. Stable nitrogen ratios ($\delta^{15}N$) possess a characteristic stepwise enrichment between a consumer and its prey and therefore indicate a consumer's trophic level, while those of carbon ($\delta^{13}C$) remain stable across trophic levels and accordingly reveal carbon sources at the base of a food web. Here, we used stable isotopes of carbon and nitrogen to assess the dietary habits of a local species of tiger beetle. *Cicindela repanda* larvae were extracted from their burrows along the South Saskatchewan River and subject to an experimental diet switch to derive isotopic turnover rates and diet-tissue fractionation factors. Obtaining a diet-tissue fractionation factor specific to *C. repanda* allows us to avoid the use of literature-based fractionation estimates and improves our certainty in using mixing models to estimate the relative proportions of food items into the consumer's diet. This approach to food web analysis provides a continuous measure of the assimilation of energy through all trophic pathways and negates the need for complicated long-term sampling procedures.

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⁶Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany.

What no-choice and two-bioassays can tell us about Aster leafhoppers' host choice selection behavior

Berenice Romero¹, Chrystel Olivier², Tyler Wist², and Sean Prager¹

¹Department of Plant Sciences, University of Saskatchewan, Saskatchewan, Saskatchewan, Canada. S7N 5A8.

²Agriculture and Agri-Food Canada, Saskatoon Research and Development Centre, Saskatoon, Saskatchewan, Canada. S7N 0X2.

Email: <u>berenice.romero@usask.ca</u>

Abstract:

Phytoplasmas are obligate parasites associated with several diseases in plants, affecting crop yield and resulting in important economic losses in Canadian agriculture. The phytoplasma subgroup responsible for causing Aster Yellows disease is primarily transmitted by migratory populations of Aster leafhoppers (*Macrosteles quadrilineatus* Forbes). Given the migratory nature of this insect species and the difficulties in predicting the occurrence of outbreaks in canola fields, aspects such as its host range and development on different plant species in the Canadian Prairies has been understudied. We examined a variety of domesticated and non-domesticated plant species commonly found in the Canadian Prairies to understand to understand the effects of the plant host on leafhoppers' development and host-choice selection behavior. We additionally evaluated whether these factors are affected by phytoplasma infection. No-choice bioassays were conducted to examine leafhopper oviposition behavior and nymph development. To better characterize settling and probing behaviors when two food options are available, two-choice bioassays were performed.

Appendix B: Treasurer's Report

ENTOMOLOGICAL SOCIETY OF SASKATCHEWAN MEMBERSHIP AND YEAR END FINANCIAL REPORT

01 September 2020 – August 31, 2021

MEMBERSHIP

In 2020-2021 the ESS had 92 members (31 full members paid up in 2020-2021 (plus, 24 Life Members) and 39 students) so 55 of our total membership were in good standing, which is higher than last year. Welcome Megan Vankosky, as our newest life member from the 2020-2021 fiscal year!

ESS GENERAL ACTIVITIES

- The main sources of income were from membership dues with \$575 collected and interest income of \$1131.65.

FINANCE

- The ESS total assets are as follows:

Term Deposits (balance plus accrued interest)

#007	12,000
#009	15,640.09
#011	13,391.19
#012	11,517.61
	6,591.30
	0.00
	0.00
S	0.00
	#009 #011 #012

Total 58,387.19 (58,441.65 in previous year)

- The ESS accounts will be audited by J. Soroka and C. Olivier.
- Registered Charity and Non-Profit Corporations status will be renewed (Jan 2022).
- Registered Charity Tax Return will be filed in Feb (2022).

Please refer to the enclosed financial statement for further details.

Financial Statement – Entomological Society of Saskatchewan 01 September 2020 – August 31, 2021

MAXIMIZER ACCOUNT (ESS)

Receipts:

Memberships	\$ 575.00
Outstanding deposits	0.00
Interest (CU Maximizer and Term Deposit)	1131.65

TOTAL 1706.65

Expenditures:

Brooks Award	500.00 (Berenice Romero)
Ent. Act. Award	00.0 (Not awarded)
Student Presentation Award	100.00 (Andrea Wade)
Postage	0
Bank Charges (Statement Print Fee)	12.00
Website fee	339.82
Misc. (PayPal Fees)	26.29
Misc. (ISC) Not-for-profit status renewal	15.00
TOTAL	993.11

Excess of Receipts over Expenditures \$ 713.54

Appendix C: Secretary Report



Secretary Report, Entomological Society of Saskatchewan, Fall AGM Meeting December 3, 2021

Activities

III. Position Maintenance

- Relayed communications directed at the ESS to the membership
- Preparation of Proceedings of the ESS, 2020
- Preparation of minutes for ESS spring meeting 2020, Executive Meeting September 27, 2021, and Executive Meeting November 29, 2021.
- Preparation of agenda for ESS AGM 2021.

IV. Insect Inquiries

- As the secretary I received and forwarded on 42 insect inquiries to the membership from the public and other professionals interested in Saskatchewan's entomological fauna. Some of the notable inquiries are as follows:
 - A) Public inquiries
 - 1) Mystery blurry spider from Mil Gou (Fig. 1)
 - 2) Milberts tortoiseshell, *Aglaia milberti*, from Josephine Sane (Fig. 2)
 - 3) Elm Sawfly, *Cymbex americanus*, from Don Neudorf (Fig. 3).
 - B) Media inquiries directed to the ESS
 - 1) None to report
 - C) Communications to the ESS
 - 1) Vincent Hervet with the Entomological Society of Manitoba reached out to advertise participation in their Annual General Meeting
 - 2) Bette Beswick with the Entomological Society of Alberta reached out to advertise participation in their Annual General Meeting

3) Julia Adamson with the Friends of the Saskatoon Afforestation Areas Inc. contacted the ESS to request participation in the coming City Nature Challenge in Saskatoon, 2022 (Appendix A).



Fig. 1 – Mystery spider (Corie Sheffield suggested it could be *Tegenaria* sp. – however image quality makes identification an entertaining exercise).

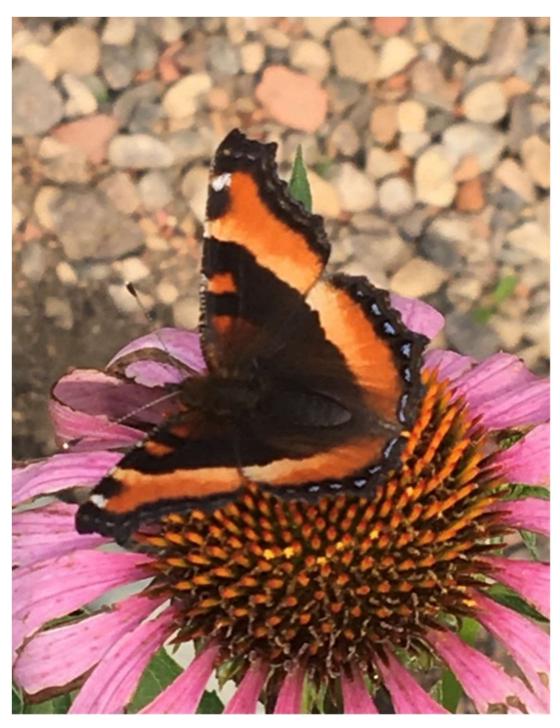


Fig. 2 – Milberts tortoiseshell in Sasaktoon, *Aglaia milberti* (Godart, 1819), (Lepidoptera: Nymphalidae). Identification by Jeff Boone.

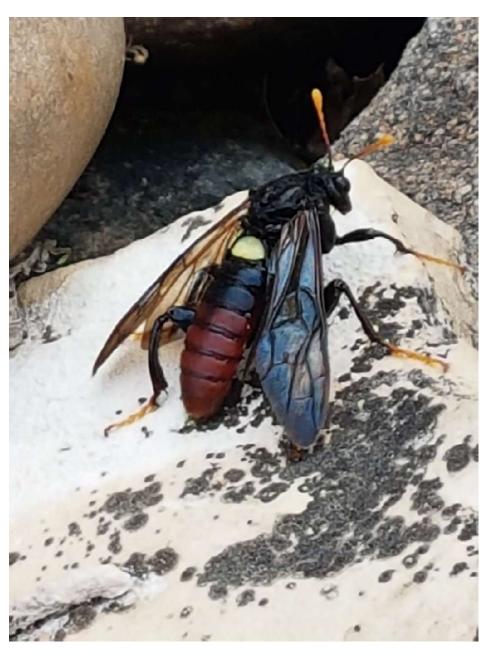


Fig. 3 – Elm Sawfly in Saskatoon, *Cymbex americanus* Leach, 1817, (Hymenoptera: Cimbicidae). Identification by Iain Phillips.

Secretary Report Appendix A: Letter from the Friends of the Saskatoon Afforestation Areas Inc.





To: Entomological Society of Saskatchewan.

From: Friends of the Saskatoon Afforestation Areas Inc.

Re: 2022 City Nature Challenge Saskatoon Participation

Here's a great opportunity for the City of Saskatoon to get citizens connected to nature while taking part in an international event designed to track biodiversity. The City Nature Challenge (CNC) is an annual event run by the Community Science teams at the California Academy of Sciences and the Natural History Museum of Los Angeles County. Since launching in 2016, the CNC has grown into an international event that inspires people around to world to find and document wildlife (flora and fauna) in their cities. Last year over 419 cities in 44 countries participated, including 26 Canadian cities from coast to coast. It's a friendly challenge to see which city can gather the most observations of nature, find the most species, and engage the most people. Last year participants tracked over 1 million observations!

The CNC is a fun, simple, and family-friendly event that's easy to execute and can easily fit within public health guidelines. Using the free downloadable app found at iNaturalist.ca, people can search for and document their local biodiversity simply by taking pictures and uploading them through the app or online. It's a wonderful way to get local area residents involved in a "citizen science" event that contributes to an international database of biodiversity.

The CNC 2022 event takes place April 29 – May 2. Anyone can participate in the CNC, and inspiring people, Entomological Society of Saskatchewan. to explore local green spaces and natural habitats has added benefits, including developing a record of local wildlife or finding invasive species. [

By collaborating with Friends of the Saskatoon Afforestation Areas, your involvement would help increase citizen participation as we compete against other Canadian cities. It will also showcase the City's commitment to biodiversity and conservation. Depending on your desired level of involvement Entomological Society of Saskatchewan. could help promote the event through its communication channels, encourage others to get involved, challenge other cities and green groups in the area or host other activities as you see fit.

We welcome the opportunity to discuss a collaboration with Entomological Society of Saskatchewan. to participate in the CNC 2022 event. If Entomological Society of Saskatchewan. could please mention the dates to as many people as possible to get additional people involved, it would be greatly appreciated, April 29 to May 2 for iNaturalist observations, and May 3 to May 8 for iNaturalist identifications, with the International CNC winner announced on May 9. The expertise of Entomological Society of Saskatchewan members and volunteers would be invaluable during both the observation phase, and the identification phase of this challenge to place Saskatoon on the world stage. Let us know if you can possibly assist with the event promotion, or if you would like to be a co-host for the event.





By becoming aware of our biodiversity, it does enable Saskatoon Citizen Scientists to protect, preserve, and wish to repair the natural, non-human environment. This environmental education and awareness does go a long way, as you cannot protect what you do not know.

Please contact us at your convenience. Thanks for considering this request to have Entomological Society of Saskatchewan. involved. To learn more on what the CNC is all about, visit citynaturechallenge.ca, <u>CNC YXE on iNaturalist</u> and the <u>CNC YXE website for Saskatoon's</u> involvement. Here is YouTube video https://youtu.be/rcGRG-2ANbo for more information on the <u>City Nature Challenge Saskatoon</u> – We would love to provide recognition to you and add your logo for your involvement!

Kind Regards

Julia Adamson

Friends of the Saskatoon Afforestation Areas Inc.

Organisers of the CNC YXE 2022 event : Saskatoon City Nature Challenge 2022

210 Appleby Court Saskatoon SK S7M 4B2 Phone 306.380.5368 Email friendsafforestation@gmail.com

The City Nature Challenge Canada initiative is led by



Appendix D: Entomological Society of Canada Regional Director Report

ENTOMOLOGICAL SOCIETY OF CANADA

REGIONAL DIRECTOR'S REPORT

Name of affiliated Society:

Entomological Society of Saskatchewan

Date:

April 2021 to November 2021

Summary of activities during report period:

BOD Meeting October 1, 2021

Awaiting minutes, agenda attached

Agenda highlights

- Meeting Code-of-Conduct complaints handling process
- The Canadian Entomologist will move to an all-electronic publishing format in 2022
- ESC financial statements
- Draft financial statements for the ESC Scholarship Fund (for information)
- Proposal to increase membership dues effective 2023
- Advertising in the *Bulletin*
- Joint Annual Meetings: B. Riel JAM 2021 Niagara Falls, F. Sperling JAM 2022 Vancouver, J. Tansey JAM 2023 Saskatchewan, É. Normandin JAM 2024 Québec
- JAM 2022. (ESA ESC ESBC) Report attached

BOD Meeting 2, October 19, 2021

Awaiting minutes, agenda attached

- Greeting to new board members
- Ward Strong stepping down as treasurer

Slate of candidates for election at the Annual Member Meeting

Position	Name and affiliation	Term
Societal Director (2 nd Vice- President)	Colin Favret, Université de Montréal, PQ	3 years
Director at large	Kyle Bobiwash, University of Manitoba, MB	3 years
Regional Director, ESBC	Brian van Hezewijk,CFS, Victoria, BC	3 years

Regional Director, ESO	Rosalyne Labbé, AAFC, Harrow, ON	3 years
Regional Director, AES	Jessica Vickruck, AAFC, Fredericton, NB	1 year
Student & Early Professional Director	Matt Muzzatti, Carleton University, ON	3 years

Recommendations or action items for the attention of the ESC Board of Directors:

• J. Tansey has stepped down as RD. Neil H "The ESS term for Regional Director goes from 2020-2023, so ESS needs to nominate a regional director to fill the two years 2021-2023. As directors can only be **elected** at an Annual Members Meeting, the ESS nominee cannot be elected until 15 November 2022. However, if a nominee is presented to me by ESS in the near future, the Board can **appoint** that nominee to the Board until the 2022 Annual Members Meeting, at which point the election can occur."

• Forward Ent enthusiast information

Respectfully submitted Jim Tansey

Regional Director, ESC

19-11-2021

Who is an Entomology Enthusiast?

- An individual engaged in entomological pursuits such as collecting, learning about, observing
- or photographing insects as a pastime.
- BUT not eligible for any other ESC membership category. That is, someone who doesn't derive a significant amount of their income from entomological activity, such as those working as or training to become a professional entomologist.

What are the Benefits of an Entomology Enthusiast?

- Approximately 50% discount from Regular ESC membership fees
- On-line access to all issues of the Canadian Entomologist, all Memoirs ever published, and

the Bulletin of ESC

- Discounts for entomology books from some publishers.
- Reduced registration fees for the ESC Annual Meeting
- Opportunities to interact with other entomologists from across Canada

Student (\$56.25)

Student without TCE access (\$28.25)

Student members must be registered in a recognized educational institution.

Entomology Enthusiast (\$56.25)

A person who is engaged in entomological pursuits as an amateur (e.g. collects and/or studies insects as a pastime), and who does not derive a significant amount of their income from entomological activity, such as entomologist instructors/researchers (university or college), government researchers and extension personnel or students enrolled in a graduate program in entomology.

Early Professional (\$85.00)

Early professional membership applies to persons within 5 years of graduation (based on the calendar year) from their highest educational degree, if they feel their circumstances do not allow them to pay for a Regular membership.

Emeritus (\$75.00)

Emeritus without TCE access (free)

Emeritus members have been regular members in good standing for at least 10 years and have retired from active employment.

Appendix E: Honours and Awards Committee

Report from Entomological Society of Saskatchewan Awards Committee

Presented at ESS Winter 2021 Meeting Prepared by Sean Prager and Tyler Wist

The awards committee presented two Entomological Actives Awards for 2021.

Aaron Bell was awarded \$500 in support of his research project investigating whether *Sericoda spp.* are attracted to fire. He will present the results of this project at the Winter 2021 meeting.

Dr. Abigail Cohen was awarded \$750.00 to support her attendance at the 2021 Entomological Society of America Annual Meeting. She will provide a write-up on this experience and her presentation to the ESS newsletter.

In total, \$1,250 dollars was awarded. This is \$250 less than the annual limited of \$1,500.

III. ESS-ESC JAM 2023 LOC Minutes – December 17th, 2020



Minutes of the December 17th, 2020 Executive Meeting of the ESS-ESC JAM 2023 LOC 1:00 pm

Online through WebEx connections.

Present: James Tansey, Stefanie de Heij, Meghan Vankosky, Sean Prager, Marianna Horn

Tyler Wist, Stephen Srayko, Iain Phillips

Chair: Stephen Srayko, President ESS

13:00 Call to Order – Stephen Srayko

Topic for discussion

Planning meeting for preparations to host the 2023 ESS-ESC JAM in Saskatchewan.

Background

This meeting was organized to discuss steps that need to be taken in initiating a planning committee for the 2023 ESS-ESC JAM in Saskatchewan, and identify Local Organizing Committee (LOC) positions.

Discussion

- 1) General Chair Tyler Wist volunteers for this position
- 2) Scientific Co-chairs Meghan Vankosky and Sean Prager volunteer for these positions
- 3) Site Committee (Local Arrangements Chair)— James Tansey and Iain Phillips volunteer as cochairs for this position.

a. Accommodation

- The LOC discusses the possibility of using Saskatoon Tourism to assist in getting accommodation proposals from hotels.
- James Tansey will reach out to Regina Tourism to solicit whether they can provide similar services.

b. Meeting Structure

- The LOC discusses the possibility of hosting a hybrid meeting, but James Tansey has reservations about pursuing this structure. His experience has been that there are substantial logistical headaches.
- Iain Phillips suggests that if we have a hybrid structure there would be little incentive for participants to travel to Saskatoon, and the society could compromise the accommodation we commit to with local hotels.
- The LOC decides not to pursue a hybrid virtual and in-person meeting as it would be too logistically challenging.

4) Promotions Committee Chair

- This committee would be responsible for making announcements and advertising the meeting. Stephen Srayko and Marianna Horn volunteer to co-chair Promotions Committee (see Website Design Committee Chair position below).

5) Fundraising Committee Chair

- This committee will be taken over by Strauss Company; however, Jeff Boone did such a good job of fundraising at the last ESS-ESC JAM in 2014 the committee will approach him to provide advice on local fundraising opportunities.

6) Website Design Committee Chair

- The LOC discusses and decides that the Website Design Committee could be lumped together with the Promotions Committee Chair position.
- Stephen Srayko volunteers to lead the Promotions Committee, and Marianna Horn volunteers to co-chair.

7) Scientific Program Committee

- -This is a sub-committee of the Scientific Co-Chair positions.
- Stefanie de Heij volunteers to lead this.

8) Student Co-Ordinator Position

9) Activities Chair

- Stefanie de Heij, Iain Phillips, and James Tansey volunteer to organize this section.

10) Volunteer Co-Ordinator

- no volunteers for this position.

MOTION: Tyler Wist/Iain Phillips. THAT the December 17th, 2020 Executive Meeting of the ESS-ESC JAM 2023 Entomological Society of Saskatchewan LOC be adjourned.

CARRIED.

IV. Minutes - Wood-Boring Beetle Rearing Facility Objective - January 26th, 2021



Minutes of the January 26th, 2021 Executive Meeting of the Entomological Society of Saskatchewan 1:00 pm

Online through WebEx connections.

Present: Tyler Wist, Sean Prager, Stephen Srayko, Jeff Boone, James Tansey, Stefanie de Heij, Iain Phillips

Chair: Stephen Srayko, President ESS

13:00 Call to Order – Stephen Srayko

Topic for discussion

Discussion of the possibility for the ESS to pay for the transportation of wood-boring beetle rearing facility from Canadian Food Inspection Agency to Saskatchewan for member use in scientific studies.

Background

Jeff Boone was contacted by Troy Kimoto of the Canadian Food Inspection Agency in an offer to donate an insect rearing facility to a non-profit organization in Saskatchewan. The particular rearing facility is in the form of a 40ft. steel transport container modified with ~40 mesh cages, drills, hot plates, Tyvek labels, and pneumatic lift to move logs in emergence investigations. The conditions of the donation were as follows:

- 1) The receiving organization would have to be a registered non-profit.
- 2) the recipient would have to pay for the shipping costs to move the facility.

Discussion

Jeff Boone

- Provided the background to the group, and presented the option to have the ESS use its registered non-profit status to take custody of the container, and to pay the cost of transporting the facility to Saskatchewan.

- Jeff Boone provided an option for the City of Saskatoon to host the facility on City property, as they would make use of it for their own activities frequently.
- The facility would have open access to ESS members to use it during business hours once the COVID-19 restrictions are eased on City property.
- Jeff Boone has received positive feedback from the City of Saskatoon about the idea, and he is willing to prepare and submit a business case to the Parks Director at the City of Saskatoon for the collaboration.

Iain Phillips

- Iain has approached the Saskatoon Wildlife Federation through Todd Holmquist, Executive Director, to find an additional option for storing the facility in Saskatoon.
- This would be an option, although the ESS or another group would have to be ready to assist with the electricity costs of operation and other costs for maintenance.

MOTION 1): Jeff Boone motions, Tyler Wist seconds. THAT the ESS partner with the Canadian Food Inspection Agency to receive the shipping container in donation.

CARRIED

MOTION 2): Jeff Boone motions, James Tansey seconds. THAT the ESS will pay for the shipping of the container up to a limit of \$6,000.

CARRIED

Action Items

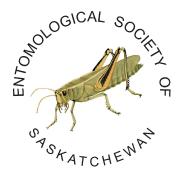
- 1) Jeff Boone will price out the shipping costs to move the facility to Saskatoon.
- 2) Jeff Boone will inform Canadian Food Inspection Agency of the Society's decision to receive the container.
- 3) Iain Phillips will prepare the meeting minutes of the discussion and ESS Executive's decision to receive the container.

Adjournment

MOTION: Stephen Srayko/Iain Phillips. THAT the January 26, 2021 Executive Meeting of the Entomological Society of Saskatchewan.

CARRIED.

V. ESS-ESC JAM 2023 LOC Minutes – February 8th, 2021



Minutes of the February 8th, 2021 Executive Meeting of the Entomological Society of Saskatchewan 1:00 pm Online through WebEx connections.

Present: Tyler Wist, Sean Prager, Stephen Srayko, Jeff Boone, Stefanie de Heij, Iain Phillips, Meghan Vankosky, Marianna Horn

Chair: Stephen Srayko, President ESS

13:00 Call to Order – Stephen Srayko

Topic for discussion

Planning meeting for preparations to host the 2023 ESS-ESC JAM in Saskatchewan.

Background

This meeting was organized to discuss steps that need to be taken in initiating a planning committee for the 2023 ESS-ESC JAM in Saskatchewan.

Discussion

Sean Prager

- Sean brought up concerns that participants in the 2023 ESS-ESC JAM would not be able to fly in and out of Regina should it be hosted there as recent news articles have suggested reduced capacity at the Regina International Airport.

Jeff Boone

- Jeff suggests that Saskatoon is a more appealing option for hosting the 2023 ESS-ESC JAM as it has the largest group of active entomologists in the province.

Iain Phillips

- Iain identifies that we are still waiting on a competing bid from Tourism Regina as a possible location to host the 2023 ESS-ESC JAM in Saskatchewan and we have not heard whether James Tansey has received this bid yet.

Tyler Wist

- Tyler suggests that we schedule a meeting with a separate 2023 ESS-ESC JAM Site Planning Committee to provide recommendations to ESS Executive.
- Tyler will get in touch with Wayne Goertzen and Keith Moore who helped organize location for the meeting at the last meeting to ask for advice on site locations.
- Tyler also identifies that Agriculture Canada employees would not be allowed to travel to Regina to participate in the 2023 ESS-ESC JAM if held in Regina as part of their work.

Meeting Date Discussion:

Dates presented and discussed as options in which to host the 2023 ESS-ESC JAM were as follows:

September 24-27, 2023

- Executive members felt this was too early in the fall, out of keeping with normal periods to host the meeting.

October 1-4, 2023

- Remains as an option for conducting the meeting.

October 8-11, 2023

- This time period interferes with Thanksgiving.

October 15-18, 2023

- Remains as an option for conducting the meeting.

October 22-25, 2023

- This date conflicts with the Entomological Society of America Meeting.

Sean Prager

- Based on the constraints identified above, the time periods of October 1-4, 2023 and October 15-18, 2023 are the windows of time we should consider further.

Meghan Vankosky

- Meghan suggests that the planning committee submit a proposal to executive for the dates and executive will vote to approve one of the windows of time.

Action Items

- 1) Iain Phillips will circulate an invitation to the membership of the Entomological Society of Saskatchewan to join the organizing committee for the 2023 ESS-ESC JAM, and specifically, a 2023 ESS-ESC JAM Site Planning Committee.
- 2) 2023 ESS-ESC JAM Site Planning Committee will meet and provide a recommendation for dates to hold the meeting to ESS Executive will vote on a date to hold the meeting.
- 3) ESS Executive convene a subsequent meeting to vote on a date to hold the 2023 ESS-ESC JAM meeting.

Adjournment

MOTION: Tyler Wist/Jeff Boone. THAT the February 13th, 2021 Executive Meeting of the Entomological Society of Saskatchewan be adjourned.

CARRIED.

VI. ESS-ESC JAM 2023 LOC Minutes – September 27th, 2021



ESS 2023 JAM planning meeting

September 27th, 2021

Call to order

Facilitator Name called to order the regular meeting of the ESS-ESC JAM planning meeting at 1:00 PM on Sept 27 2021 at Webex.

Roll call

Secretary Name conducted a roll call. The following persons were present: Stephen Srayko, Chis MacQuarrie (ESC rep), Jeff Boone, Danielle Stephens, Tyler Wist, Sean Prager, Marianna Horn, Stefanie De Heij. Iain Phillips

Approval of minutes from last meeting

Secretary Name read the minutes from the last meeting. The minutes were approved as read.

Open issues

Chris MacQuarrie lays out the critical functions that we need to do right now Pick venue, appoint chair, Need a bank account so that we can get the ESC money transferred and we will have the seed money deposited from

Fundraising, local \committee will coordinate with the ESC fundraising meeting . etc. Ontario has \$12,000 this year for their JAM. For example. We need to set an SK rep the ESC committee. Send back to Christopher Dufault. Jeff Boone speaks to the regional connection and how he had worked as the co-chair with Iain at the 2014 meeting. Appointee will sit on the ESC fundraising committee to learn until they host the meeting.

Hybrid meeting. A lot of members want that? Chris discusses these meetings, Ontario is doing a full online meeting and lost 8k when they cancelled out their in-person meeting. The local committee discussed the value of hybrid, virtual, and in-person meetings. Discussed recorded talks etc.

Our choices Delta and Sheraton. We discussed pros and cons of each. On campus meeting. We need to decide. We put it to a vote and it was unanimous that we chose the Delta Hotel (formerly the Radisson).

Local organizing meeting. Talk to Dwayne as Treasurer? Jeff Boone volunteers as backup treasurer and fundraising committee on the committee.

New business

Sign contract with Tourism Saskatoon and pick the Radisson Hotel. Iain Phillips has agreed to be the Local Organizing Committee Chair.

Set regular monthly meetings. In Teams

Finalize DATES Oct 1-4, or Oct 15-18. We have unanimously selected Oct 15-18, 2023.

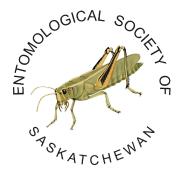
Adjournment

Facilitator Name adjourned the meeting at 2:04

Minutes submitted by: Tyler Wist

Minutes approved by: Name

VII. ESS-ESC JAM 2023 LOC Minutes - November 29th, 2021



Minutes of the November 29th, 2021 Executive Meeting of the Entomological Society of Saskatchewan 1:00 pm

Online through WebEx connections.

Present: Tyler Wist, Sean Prager, Stephen Srayko, Jeff Boone, Stefanie de Heij, Iain Phillips, James Tansey, Aaron Bell, Dwayne Hegedus, Danielle Stephens

Chair: Tyler Wist, Treasurer ESS

13:00 Call to Order – Tyler Wist

Topic for discussion

Planning meeting for preparations to host the 2023 ESS-ESC JAM in Saskatchewan.

Background

This meeting was organized to discuss steps that need to be taken in initiating a planning committee for the 2023 ESS-ESC JAM in Saskatchewan.

Agenda Items

1. Regional ESC Director position at the ESS.

Background

James Tansey has stepped down as the ESC Regional Director and Danielle Stephens has stepped forward to take the position.

ACTION ITEM:

In order for Danielle Stephens to be confirmed as the ESC Regional Director for the Entomological Society of Saskatchewan the following steps will be necessary:

- Danielle Stephens' nomination will be voted on at the Entomological Society of Saskatchewan Regional Director at the 2021 Fall AGM of the ESS on December 3rd, 2021.
- II. Entomological Society of Saskatchewan will need to put forward a slate of candidates to the Entomological Society of Canada after the ESS Fall AGM for them to select from, but in this case it will only include one candidate—Danielle Stephens.
- III. After the 2021 Fall AGM of the ESS on December 3rd, 2021 Iain Phillips (Secretary of the ESS) will forward the slate of candidates (i.e., Danielle Stephens) to the Executive of the Entomological Society of Canada for their consideration.

2. ESS-ESC 2023 JAM Chair and Committee nominations

Background

The ESS-ESC JAM Planning Committee still has vacancies for important positions, and once these vacancies are filled the Committee will have the structure for other volunteers to join and build upon in the planning.

ACTION ITEM:

Discussion to build the ESS-ESC JAM 2023 Chair positions, their committees and sub committees produced results that are as follows:

I. General Chair -	Tyler Wist
1. Treasurer Chair—	Dwayne Hegedus
2. Fundraising Chair –	Jeff Boone
3. Culture Chair –	James Tansey
a. Culture Committee	James Tansey and
	Stefanie de Heij
i. Field Trips	
ii. Companion Programs	
iii. Cultural events	
4. Social Media Chair –	Stefanie de Heij
5. Promotions Chair –	Stephen Srayko
a. Promotion Committee –	Marianna Horn
	Stephen Srayko
6. Secretary Chair –	Danielle Stephens
7. Local Arrangements Chair -	Iain Phillips
a. Audio Visual Committee	Aaron Bell
b. Catering Committee	vacant
c. Poster Session Committee	vacant
8. Scientific Chair -	Meghan Vankosky
	Sean Prager
a. Scientific Program Commit	ttee Stefanie de Heij

General discussions as follows:

Stefanie de Heij

- Is it possible to have a cancelation insurance agreement with the host hotel in case COVID travel restrictions cause the cancellation of the 2023 JAM?

ACTION ITEM:

- I. Iain Phillips will contact the hotel to discuss contingencies in the event that the JAM is cancelled in 2023 and what financial penalties the ESS would incur.
- II. Iain Phillips will ask the hotel whether there is insurance in some form to recoup some of these penalties.

Jeff Boone

- Jeff Boone suggests that we should consider having a hybrid in-person and virtual meeting that would provide for the ability to host the meeting if participants are unable to travel in 2023.
- Iain Phillips identifies that the structure of the meeting (i.e. virtual, hybrid, in-person) was discussed in previous planning meetings as the Executive decided that the 2023 JAM would be hosted in person (See ESS Executive Minutes_December 17, 2020_v1). If we provide a hybrid option for participation there would be less incentive for the participants to travel to Saskatoon and take up the hotel rooms that are necessary as part of the occupancy package for hosting with the hotel. Further, if COVID prevents travel to the meeting then hosting it at the hotel, solely with the participants from Saskatoon makes little sense at that point and the meeting would either be completely virtual or not be conducted at all.

3. Annual General Meeting of the ESS on December 3rd, 2021 Preparation

- a. Confirmation of ESS-ESC JAM Planning structure and request for volunteers Tyler Wist
 - Tyler Wist suggests that the executive here should provide a notice of motion added to the agenda of the ESS AGM on December 3rd, 2021 that would seek to accept the structure of the ESS-ESC JAM 2023 Planning Committee structure as follows:

NOTICE OF MOTION: Tyler Wist/Iain Phillips. THAT the structure of the ESS-ESC JAM 2023 Planning Committee above be accepted.

CARRIED

- b. Chair of student presentations
 - Stephen Srayko will chair the student presentations

- c. Judges for student awards
 - Sean Prager has conflicts of interest in judging this year as he has students presenting. Jeff Boone, Stephen Srayko, and James Tansey volunteer to judge.
- d. Awards presentation
 - Because there is little time for the judges to convene between the student presentations and the business meeting, the student presentation award will be announced by Iain Phillips after the conclusion of the ESS AGM and the final evaluations of student presentations are complete.
- e. President position transferred
 - Stephen Srayko will transfer his responsibilities as president to Stefanie de Heij.
- f. Nominations Committee
 - Sean Prager will chair the nominations committee.
- g. Awards Committee
 - Stephen Srayko will move into the role of awards chair as he will be entering into the Past-President position and this is a role occupied by that position.
- h. Gardenscape 2022 has been announced
 - Iain Phillips will add the announcement of Gardenscape 2022 to the agenda and provide an invitation for volunteers.

Adjournment

MOTION: Tyler Wist/Jeff Boone. THAT the November 29th, 2021 Executive Meeting of the Entomological Society of Saskatchewan be adjourned.

VIII. ESS-ESC JAM 2023 LOC Minutes –December 10th, 2021



Agenda for the December 10th, 2021 Executive Meeting of the ESS-ESC JAM 2023 LOC 1:00 pm Online through WebEx connections.

Chair: Tyler Wist, General Chair

- 1. Present (roll call):
- 2. 13:00 Call to Order Tyler Wist
- 3. Approval of minutes of the previous ESS-ESC JAM 2023 LOC meetings
 - a. December 17, 2020 ESS-ESC JAM 2023 LOC meeting
 - b. February 8, 2021 ESS-ESC JAM 2023 LOC meeting
 - c. September 27, 2021 ESS-ESC JAM 2023 LOC meeting
 - d. November 29, 2021 ESS-ESC JAM 2023 LOC meeting
- 4. Approval of ESS-ESC JAM 2023 LOC December 10th, 2021 Agenda Items
- 5. OLD BUSINESS
 - **5.1. Regional ESC Director position at the ESS.** [Danielle Stephens]

Background

James Tansey has stepped down as the ESC Regional Director and Danielle Stephens has stepped forward to take the position. This item is to follow-up on the outcome of the ESS AGM on December 3rd, and steps forward in establishing Danielle Stephens in this position.

5.2. ESS-ESC 2023 JAM Chair and Committee nominations

Background

The ESS-ESC JAM Planning Committee still has vacancies for important positions, and once these vacancies are filled the Committee will have the structure for other volunteers to join and build upon in the planning.

5.3. Contingencies or cancelation insurance with the host hotel in case COVID pandemic leads to the cancellation of the ESS-ESC JAM 2023.

Background

Stefanie de Heij asked in the last ESS-ESC JAM LOC meeting to look into insurance for cancellation.

Iain Phillips will contact the hotel to discuss contingencies in the event that the JAM is cancelled in 2023 and what financial penalties the ESS would incur.

5.4. Annual General Meeting of the ESS on December 3rd, 2021 Preparation

Background

Updates on the Notice of Motion presented at the last ESS-ESC JAM LOC meeting and its discussion at the ESS AGM 2021.

6. NEW BUSINESS

6.2. Confirmation of contract finalization with Delta Hotel

a. Tyler Wist and Iain Phillips to confirm.

6.1. Transfer of deposit funds from ESC to ESS-ESC JAM LOC.

- a. Tyler Wist and Dwayne Hegedus is bank account prepared to receive deposit?
- b. Tyler answers. Not yet. MOTION. Wist "To add Dwayne Hegedus as Conference Treasurer Chair." SECONDED. Stephens. CARRIED.

6.3. Preparation of Budget for ESS-ESC JAM 2023 LOC meeting.

a. Discussion of Budget Chair position, or committee that falls under Treasurer etc.

6.4. Discussion of ESC survey to regional societies for future of national meetings

a. Stefanie de Heij, Danielle Stephens, and Graham Parsons will have to fill out a survey provided by Neil Holliday at the ESC on what we would like to see in future national meetings for format.

7. COMMITTEE CHAIRS and MEMBERS

7.1 General Chair - Tyler Wist
7.1.1 Treasurer Chair - Dwayne Hegedus
7.1.2 Fundraising Chair - Jeff Boone
7.1.3 Culture Chair - James Tansey
a. Culture Committee James Tansey and

Stefanie de Heij

Field Trips iv.

Companion Programs v.

vi. Cultural events

7.1.4 Social Media Chair – Stefanie de Heij 7.1.5 Promotions Chair – Stephen Srayko b. Promotion Committee – Marianna Horn

Stephen Srayko

7.1.6 Secretary Chair –

7.1.7 Local Arrangements Chair a. Audio Visual Committee

b. Catering Committee c. Poster Session Committee

7.1.8 Scientific Chair -

a. Scientific Program Committee

Danielle Stephens Iain Phillips Aaron Bell

vacant vacant

Meghan Vankosky

Sean Prager

Stefanie de Heij

8. Date of next ESS-ESC JAM 2023 LOC meeting

a. Confirm January 10, 2022

9. Adjournment

MOTION: Wist . THAT the December 10th, 2021 Executive Meeting of the ESS-ESC JAM LOC be adjourned.

Amendment to point 6.1 (made Feb 8 2022)

MOTION to appoint Dwayne Hegedus as Treasurer on the new ESC JAM account to be amended as "To open an account separate from the ESS General account at Affinity Credit Union to receive deposits and pay bills relating to the conference. The account signatories will be Tyler Wist (ESS Treasurer), Iain Phillips (ESS Secretary) and Dwayne Hegedus (ESC-ESS JAM Treasurer).

Amendment of Feb 8 2022 made by X

Tyler J. Wist

approved by X

X